when heated and applied loosens the "nits," when they can be brushed or drawn off with a piece of cloth. This means a lot of labor for the mother, but as they are anxious for the children to be clean every effort is made. That the work is needed is seen by the many requests from teachers and doctors asking for nurses in schools where they have none. While much has been done, there is still more to be done. We hope to have every school in the city supplied with a room and other essentials, as well as having a nurse. Not the least part of the education is the instruction given to the mothers in the homes in cleanliness and the smaller details of nursing.

It is hoped that other cities may find it a part of their educational system which they cannot neglect, and that in a very short time the work will be universal.

## THE TEACHING OF HYGIENE TO NURSES IN THEORY AND PRACTICE \*

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THE evolution of the instruction of nurses presents some curious phases which afford examples of "development along the lines of the least resistance." At first glimpse it would seem that the subject of hygiene should be regarded as of the greatest importance in a nurse's education and surgery of the least; but no one at all conversant with trainingschools can deny that the reverse is the rule—to such an extent that some of us are asking one another if we are not making better surgeon's assistants than nurses. That this is true is because we find along surgical lines no obstacles in the way of either theory or practice, but when we confront the subject of hygiene, especially in practice, numberless lions line the path, and we are frightened into confining ourselves to superficial theory, for which we do not find a working basis. When the medical side has as violent a seizure of the development of detail as the surgical has been working out during the past ten years we will find many of our lions gone; but meanwhile there are some things we may do ourselves. Incidentally, I wonder why no one has written a text-book on medical technique?

First, how has hygiene been taught in our schools? Usually by half a dozen lectures and as many classes on theory, while in practice almost

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nothing. Indeed, among the more intelligent class of the laity we often find a far better understanding of practical hygiene than among graduated nurses. I do not find so much fault with the amount of our theoretical instruction, because it seems to me a better way not to preach what is not practised. We teach, for instance, that three thousand cubic feet of air-space every hour is necessary for each person in a sick-room, and at the same time most of our wards do not give two-thirds as much. Our operating-rooms are built in such fashion that to maintain a sufficient degree of heat ventilation is almost entirely cut off, and when the room is filled with surgeon, assistants, and nurses, how much oxygen is left for the patient? Our homes for nurses nearly all have insufficient air-space in the sleeping-rooms, and most of us must confess to many uncomfortable thoughts when teaching upon the subject.

Again, we teach the necessity for sunlight, yet many of our schools situated in large cities are so shut in that nurses go through their whole course of training in bedrooms without a ray of sunshine. What need to theorize about food values when a majority of our hospitals give scant attention to proper diet, and almost without exception the dietary of our schools is considered mainly from the standpoint of economy? You and I know only too well of night nurses on duty twelve hours whose midnight meal perhaps consists of a slice of dried beef, bread and butter, stewed prunes, and tea, with an occasional slice of cake. The workingman's noon lunch of rye bread, cheese, and beer would be far more suitable. In this country the use of stimulants among nurses is, happily, infrequent, but I know of nothing which encourages it more than improper food.

Again, we teach at great length the various ways bacteria are carried, and at the same time we daily see nurses in hospital uniforms in street-cars on their way to and from patients. Does the question arise in our minds of how far they may be responsible for infectious complications? And then how much mischief may the nurse do who wears that abomination, the trained skirt, and comes home to hang it in the same closet with her uniforms!

How is the sweeping and dusting done in most of our institutions? By stirring up the dust vigorously with brooms, and then, to be sure that no patient escapes, giving it a second shake up with a dry cloth or feather duster.

What good to teach nurses theoretically to dust with damp cloths when a dozen maids are wielding brooms and dusters daily under their eyes?

In our cities and towns where typhoid fever prevails how much is done in most of our schools to insure pure drinking water, or how many nurses are taught how to purify it? None of us have forgotten the story, related last year of the epidemic at Cornell, of the nurse who continued to give her patients the same water from which they got their infection. Either she was lacking in principle, or her school had wofully neglected to teach her a most important point in nursing typhoid fever.

It is not necessary to go on enumerating these well-known instances, but I do wish to say most emphatically that hygiene should be better taught and better practised. The movement to give nurses a wide training in domestic science in a preliminary course solves the problem almost entirely for the schools which are in a position to give it, but what may be done in the schools for which such a course is a remote possibility?

First, we may provide a house for pupils which is kept wholesome with good plumbing and ventilation, and then teach them what that means to them personally. Further, they need much instruction in personal hygiene: the proper care of their own bodies is often as foreign to them as nursing an infectious case. When that is done we may bring them to a realizing sense of the danger to themselves of dust, impure water, bad air, infected clothing thrown on the ward floors, coming to meals without first scrubbing their hands, and so on ad infinitum. Like all other species of the human race, nurses are most powerfully moved when a subject affects them personally, and knowing that infringement of the rules of hygiene with patients is a menace to themselves helps wonderfully to impress the need of care upon them. I think the subject of proper food for patients and nurses too is the most formidable lion we have to pass. Domestic service in our country at this time is in such a chaotic state that to provide good, wholesome food for a small family is often almost an impossibility, and when the problem is multiplied by several hundred patients and a proportionate number of nurses no wonder we are appalled and resort to feeble, inadequate makeshifts.

More than fifteen years ago Miss Hampton advocated putting hospital kitchens in charge of the nursing staff, and in the institutions which have tried it the experiment has been successful, not only in affording better food, but from the standpoint of economy. We cannot, however, claim this idea as original with nurses because the nursing sisterhoods have practised it for centuries. It was my good fortune to drift, quite by accident, into the Ospedale Civile in Venice last year, and during that very short visit I saw many things which revealed much. It is nursed, of course, by the sisters, and after one has been sufficiently enraptured by its picturesqueness the cleanliness strikes one. I came away with some comparisons in mind which were truly odious. The kitchen is a neverto-be-forgotten place. While it may have lacked some Yankee inventions of convenience, it was so clean, so bright and fresh, and the suppers

going out were so well prepared, that I recalled other hospital kitchens which need no description. When a country so bowed down by poverty as Italy can furnish its sick poor such comforts, we may well ask some uncomfortable questions about our own hospitals. The consideration of public hygiene is a subject almost entirely neglected in our schools, and nurses are graduated knowing nothing of it. As a part of their last year's work I regard it as most important. The subject of ventilation, for instance, is one they should understand thoroughly, as applied not only to sick-rooms and wards, but to the systems employed for the whole of hospitals, for schools, theatres, hotels, and all kinds of public institutions.

Next and allied to ventilation is heating and lighting both hospitals and houses, in which we should go into methods with grates, stoves, hotair furnaces, and steam; likewise candles, oil, gas, and electricity.

Following is the water supply for cities, towns, villages, farms, and camps. Knowledge of the last might have spared many lives in the Spanish-American and Boer Wars.

Next, public drainage and disposal of garbage, not only for the city in which they live, but the principal cities of the world.

Next, the milk supply, transportation, refrigeration, contamination, and simple tests for adulteration.

Next, the food supply, especially of meat, poultry, fish, fruit, and vegetables.

Last, quarantine, beginning with rooms and going on to houses, hospitals, neighborhoods, towns, cities, States, countries, and ships.

All of these subjects have laws, national, State, and municipal, which nurses should know something of.

The Jewish laws regarding food make a most interesting and valuable topic, beginning with Leviticus. Ignorance of them places a nurse to a great disadvantage in doing private duty in an Orthodox Jewish household, and nurses doing district or settlement work can do so to much greater advantage with some knowledge of them, and especially if with that knowledge they have also been taught to respect the prejudices of the race.

The sum and substance then, it seems to me, is that we should teach more and better, and then put our principles upon a rational, intelligent working basis, never forgetting the scriptural injunction about "faith without good works."

